

Transformation- a T- Intersection for MANPRINT

Presented at the:

**MANPRINT Practitioners'
Workshop**

Arlington, VA

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OUR ARMY AT WAR - Changing NOW to Generate More Combat Power

Generating more combat power, and thereby increasing rotational forces, is the Army's top priority.

~~SPECIFIC OBJECTIVES - NEAR-TERM~~

- Reset the Force
- Expand the Rotation Base
- Improve Unit Manning
- Improve Power Projection Platforms/Installations
- Relieve Stress on the Force
- Rebalance AC/RC High Demand and Early Deploying Capabilities
- Pull Forward, Future Technologies, Concepts
- Recruit/Retain the "Right" All Volunteer Army
- Stabilize the Force
- Develop Modular, Standardized Units
- Protect the Force
- Improve Mobilization/Demobilization Processes

Endstate: Increased Land Combat and Support Capabilities Across the Operational Spectrum

Initiatives to Increase Land Power Capabilities

Stabilization

- Home-Basing (IOC 4Q 04)
- Unit Life-cycle (172nd SBCT 2Q 04)
- Decrease PCS Move Frequency

Reset

- Repair Equipment. Reorganize, Retrain
- Adjust Preposition Stocks of Equipment
- Replenish Ammunition Stocks

Rapid Fielding Initiative/Rapid Equipping Force

- Advanced Combat Helmet, Hydration Systems, Close-combat Optics
- Robotics and Counter IED Technologies

AC/RC Rebalance

- RC Bns Retrained as MPs, Infantry
- Increase AC Early Deploying Capabilities
- Increase High Demand Unit Capabilities CA/MPs/SOF/Transportation/Med Avn
- Increase AC/RC Unit Manning Levels

Military to Civilian Conversion

- 5,000 spaces projected in FY 05
- Up to 10K Additional Conversions Projected for FY 06 and Beyond

Modularity

- 3 ID Redesign from 3 to 4 BCTs
- Redesign Light & Heavy Bde Units of Action (UAs)
- Aviation Bde Redesign
- Increase Active Bde UAs from 33 to 48

Force Protection

- Interceptor Body Armor
- Up-armored HMMWVs
- Armor Protection Kits for Vehicles

Global Footprint/Rebasing Strategy

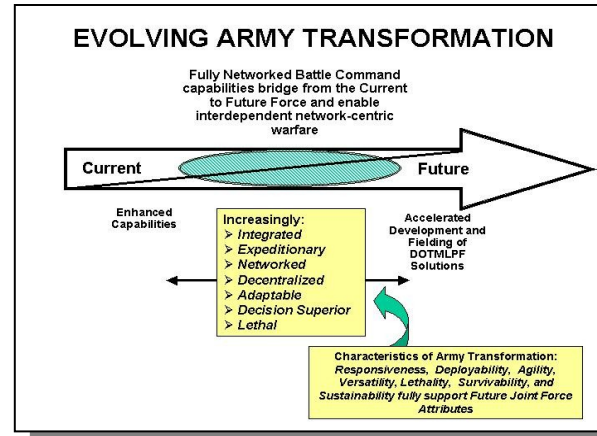
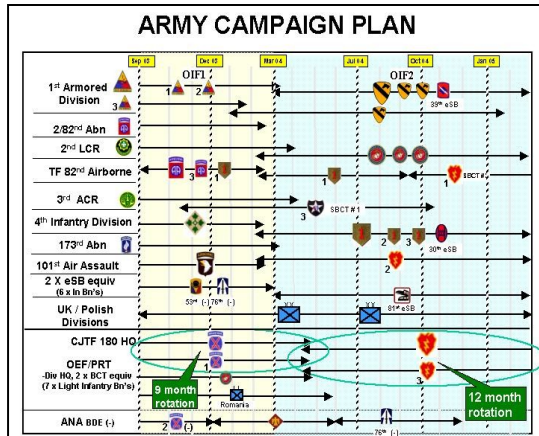
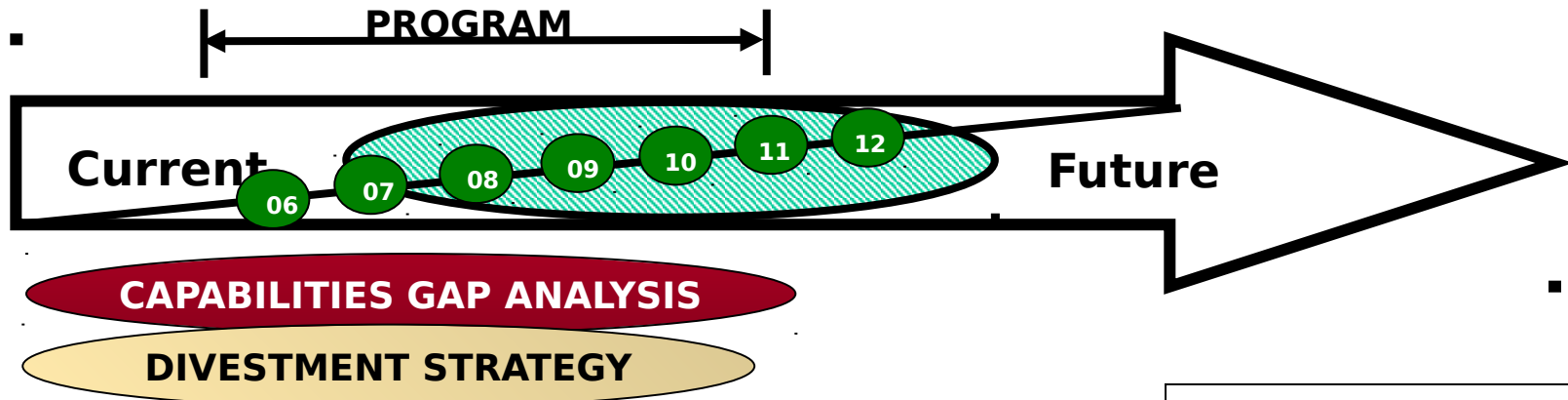
- Seek CONUS Based Global Projection
- Reduce Balkan and MFO Commitments
- Revise Europe/Pacific Basing Strategies

Pull Forward Future to Current

- Move to FCS-capable Organizations
- Realign Fielding of C2 Programs
- Earlier Fielding of UAV's, Sensors, etc.

Most Significant Redesign in 50 Years!

ARMY CAMPAIGN PLAN-FRAMEWORK



- Evaluate where last cycle left the Army
- Evaluate options to fill gaps
- Develop draft resourced plan
- Establish feedback process
- Approve resourced plan for implementation in POM
- Spend more time managing execution of budget against the plan

HOW WE WANT THE ARMY TO LOOK OVER THE PROGRAM (Resource informed)

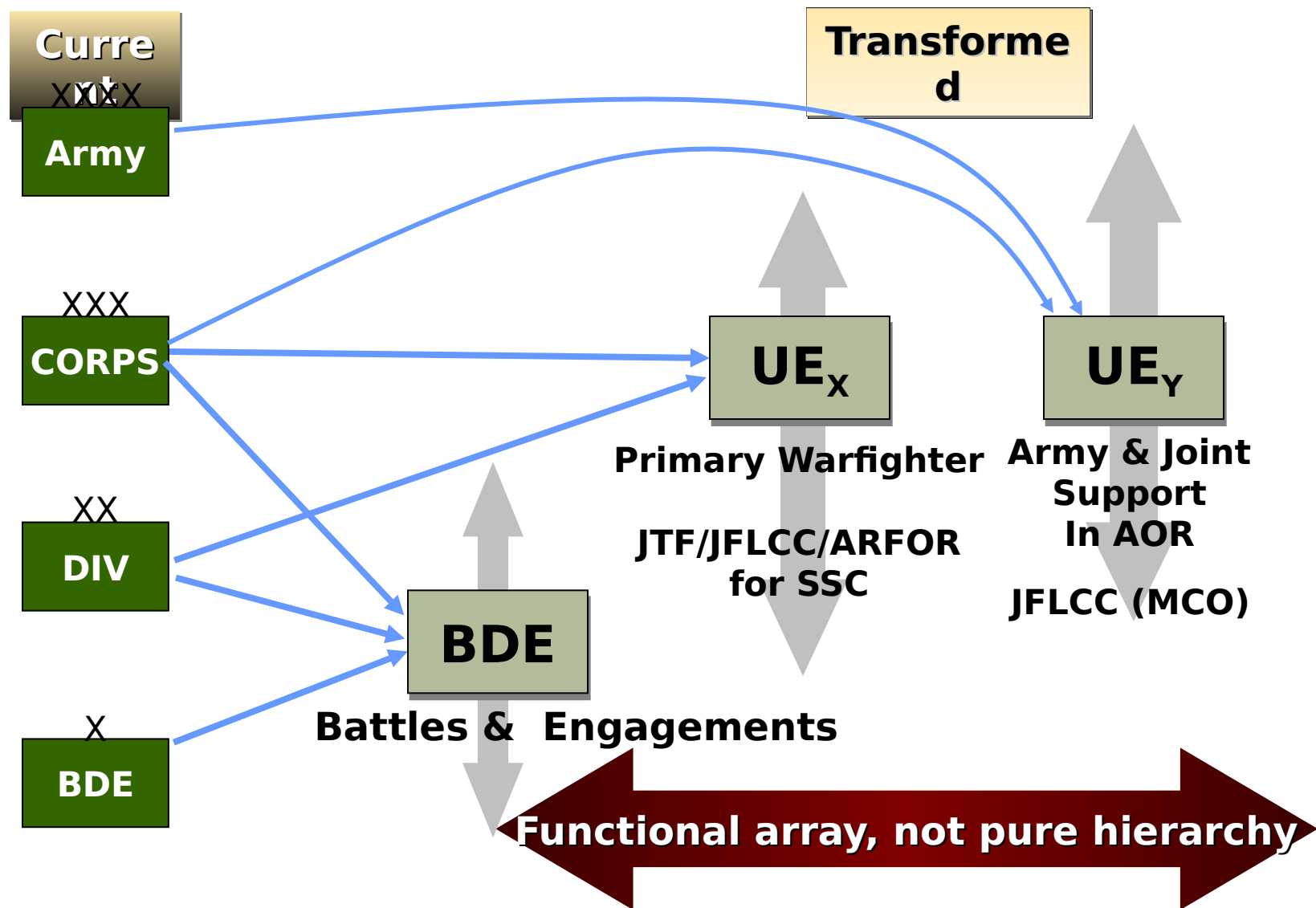
STRATEGIC POSTURE



TRANSFORMATION



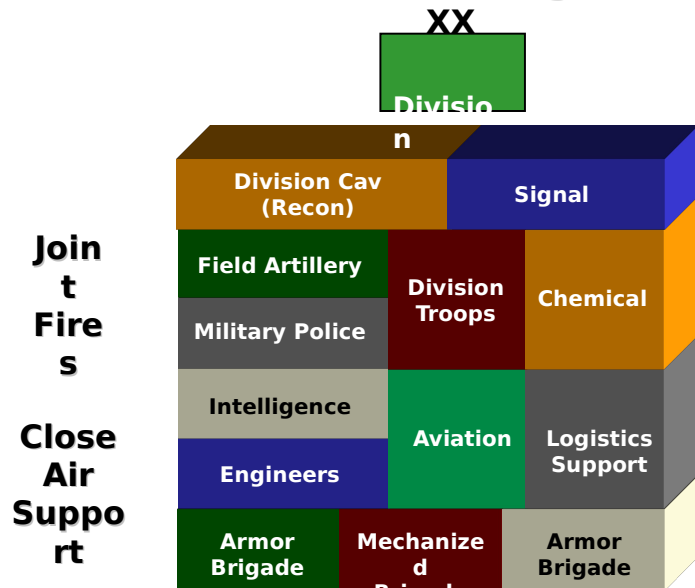
UEy and UEx



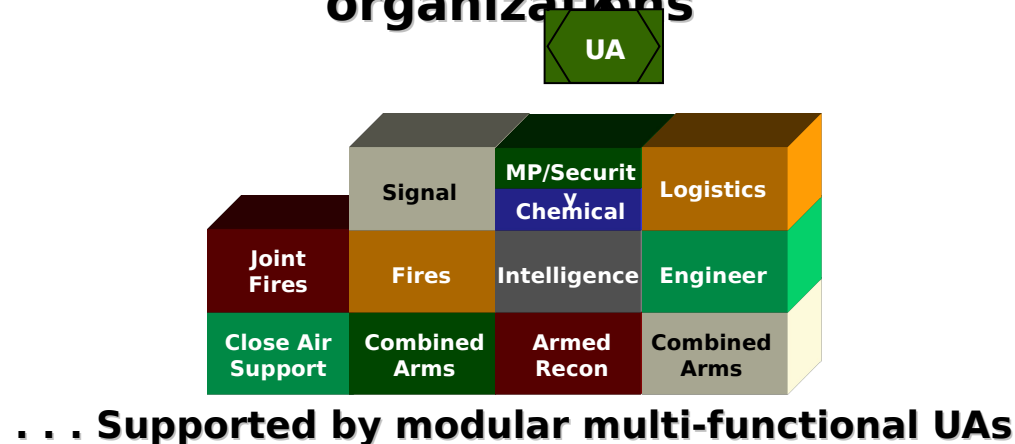
MODULARITY:

How We Will Change to Brigade-Centric Organizations

An Army based around large, powerful, fixed organizations



To an Army designed around smaller, self-contained organizations



- Don't have to deploy a whole division to get certain capabilities
- Employ smaller, tailored forces instead of one or two large units
- Smaller units simplify logistical challenges
- Creates a larger pool of units to rotate into operations

A More Relevant and Ready Force

Active and Reserve Units with the Same Structure

MODULARITY: How We Will Build Capability Over Time

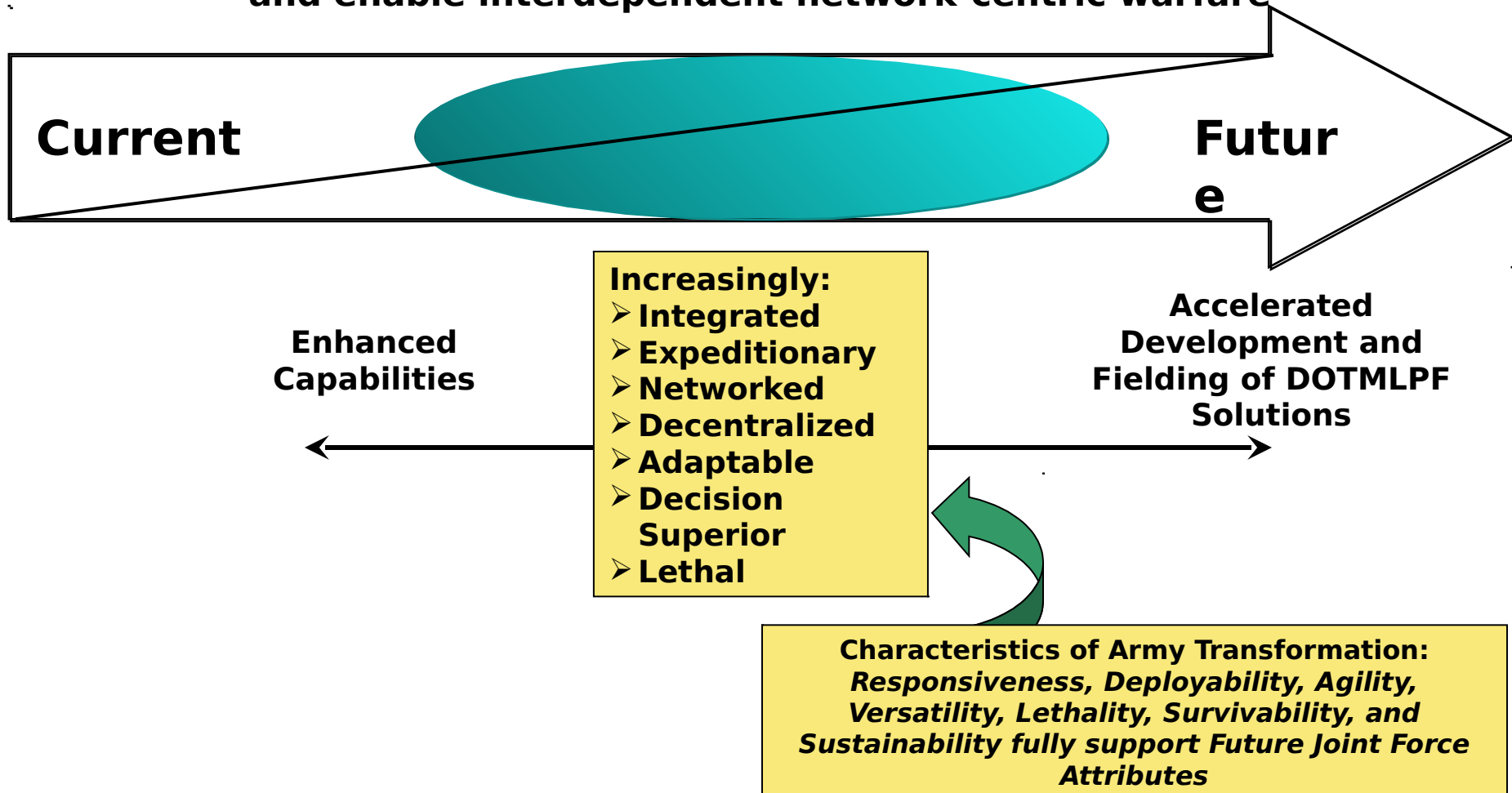
	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Current Division							
Brigade Combat Team Build of Action*				 <i>Decision to implement resourcing of final 5 UAs subject to operational necessity and OSD approval</i>			
ARNG UEx							
ARNG BCT(UA)s							
STRYKER & Other	 SBCT 2	 SBCT 3	 SBCT 4 SETAF Round-Out	 SBCT 5	 SBCT 56		

* Units of Action (UA) are brigade sized units that include key enablers making them more modular and self-sufficient

- Creates a deeper rotation pool to sustain the War and meet our worldwide commitments
- Restructures the AC/RC Combat Service Support to support modular Brigade Combat Teams

Evolving Army Transformation

Fully networked Battle Command capabilities bridge from the Current to Future Force and enable interdependent network-centric warfare



Analytical Framework (HFE)

Job Analysis:

- Workload
- Performance
- Situational Awareness
- Tech Integration Questions

• **Soldiers**



Traditional

Suitability Analysis:

- Crew Size
- Man-Machine Task Allocation
- Materiel Design
- Tech Integration Questions

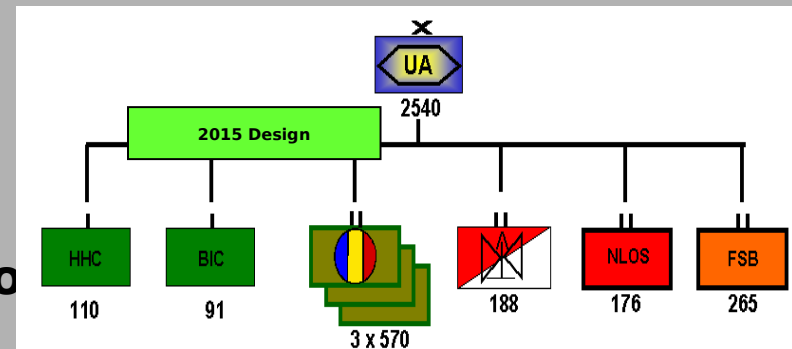
• **Platforms**



Capability Analysis:

- Force Design
- Personnel Needs
- Training Needs
- Tech Integration Questions
- System-of-Systems Integration

• **Organizations**



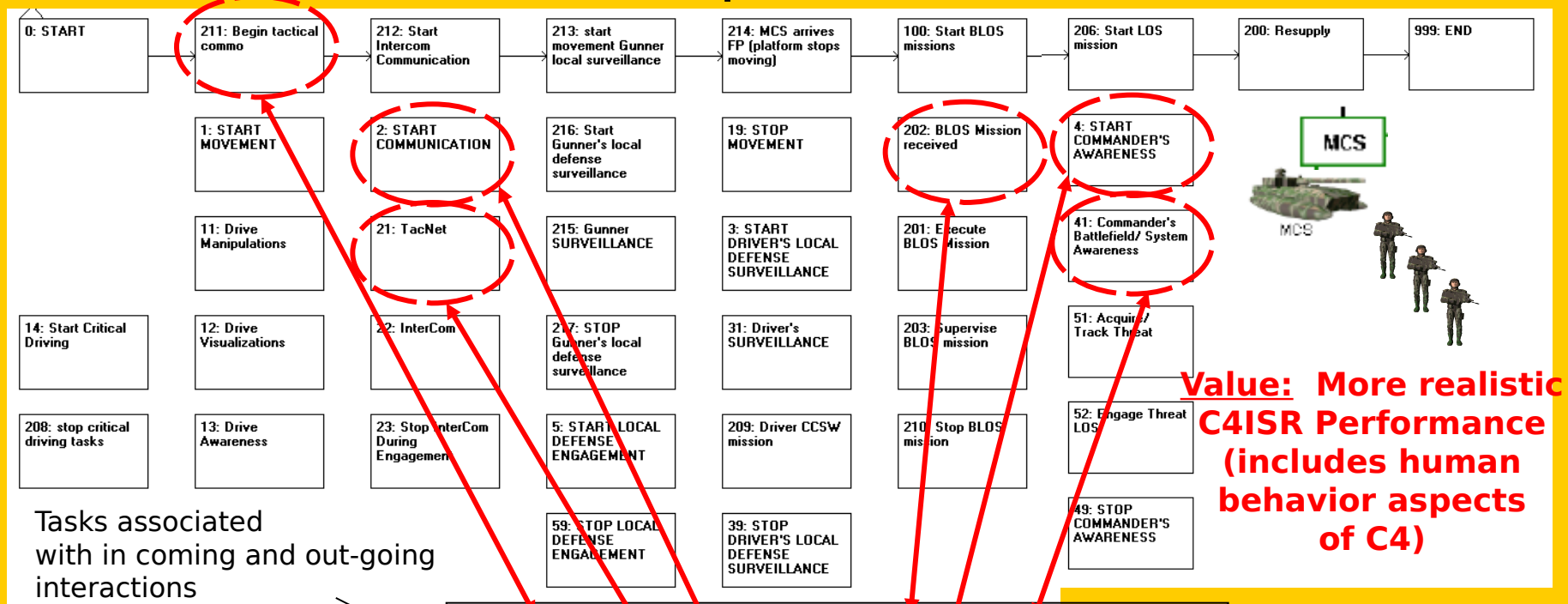
Sos Focus

Soldier Centered Analyses

OBJECTIVE: Early, rapid, cost effective and comprehensive conduct of MANPRINT analyses in support of requirements determination and validation to optimize soldier-system performance and cost.

APPROACH: Apply soldier-centered tools, models and expertise to ensure early and efficient insertion of MANPRINT goals, constraints, and human performance measures into the acquisition cycle.

Integrate Soldier Behavior into Force-on-Force Capabilities (MATREX)



IMPRINT

MATREX

Task Request

- Task ID
- Platform ID
- Task Type
- Complexity Factor
- Task Detail
- Request Time

COM

IMPRINT Interface

Task Complete

- Task ID
- Completion Status (done, aborted)
- Complete Time

HLA
RTI

Interaction

Buffer

C3 Behavior

Buffer

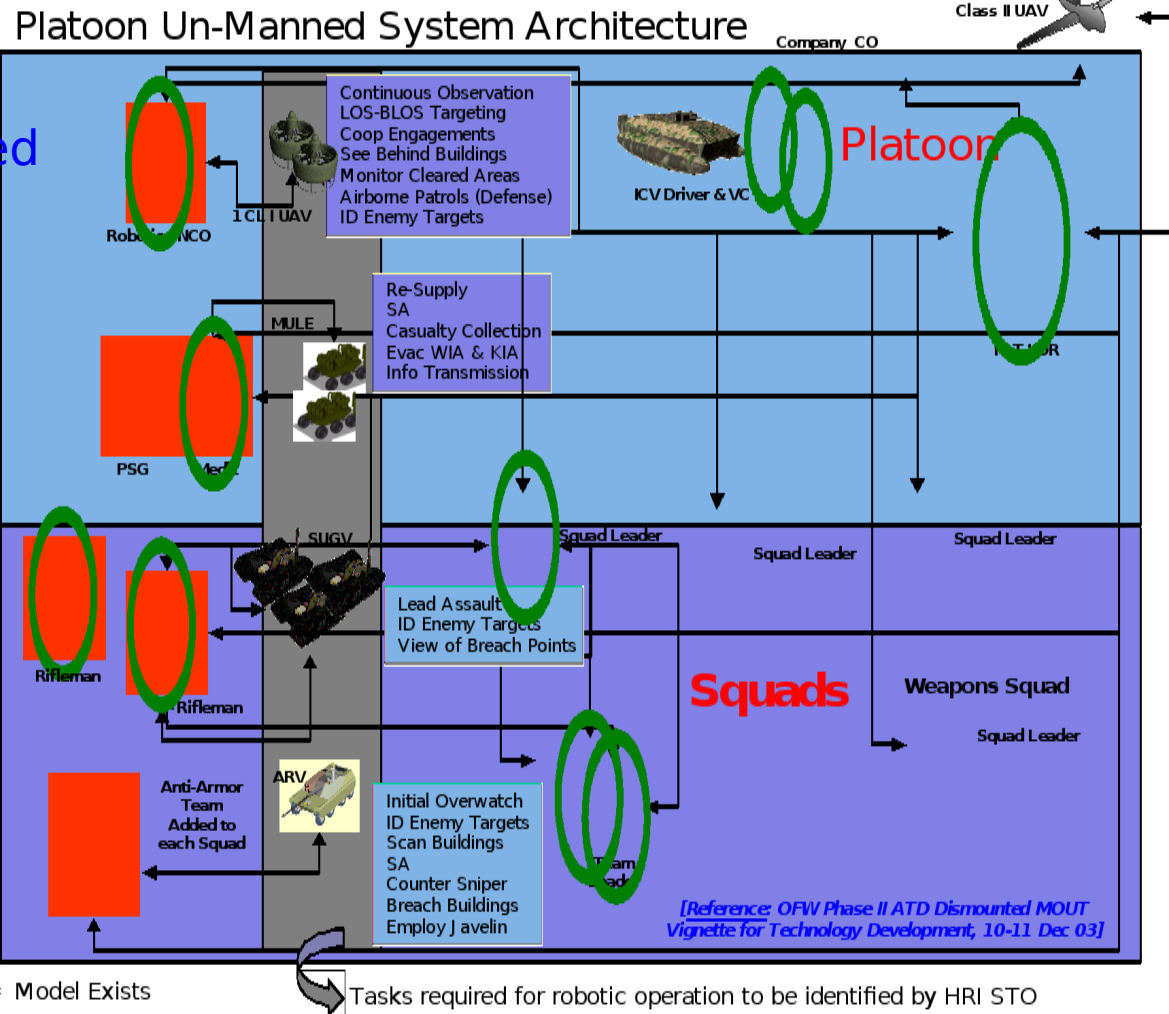
Interaction

HLA
RTI

C3 Federate

Example:

“Organization Focus” Infantry Platoon Unmanned Systems Use



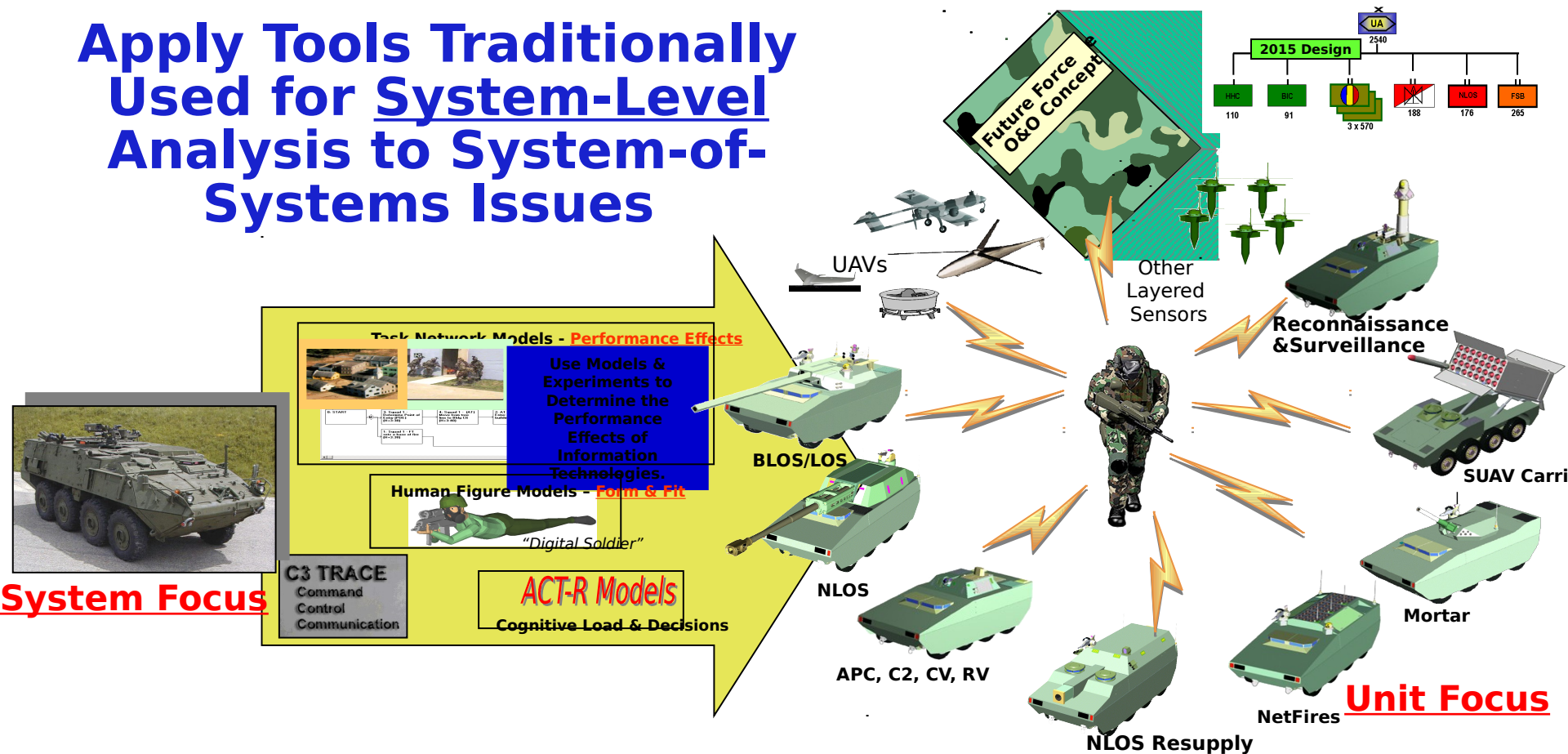
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- Force Design
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SoS Focus

Unit of Action HSI Analysis: System of Systems Approach

Apply Tools Traditionally
Used for System-Level
Analysis to System-of-
Systems Issues



**Analysis Through Modeling Ensures that the
Soldier is Considered Throughout the Army's
Transformation**

Unit of Action HSI Analysis: Concept

**Combined Arms Company Model
Manages Lower Echelon Models
& Integrates Soldier-Centric “What-if”
Impacts on Mission Performance**

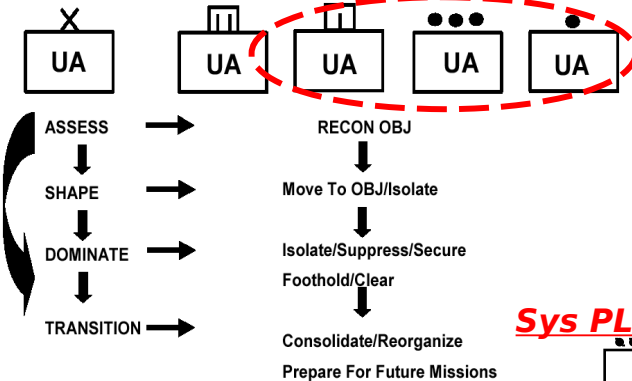
**COMBINED ARMS OPERATIONS FOR URBAN
WARFARE TO SECURE PORTION OF MAJOR
URBAN AREA**

[TRADOC PAM 525-3-90 O&O DRAFT 20 JUL 2002]

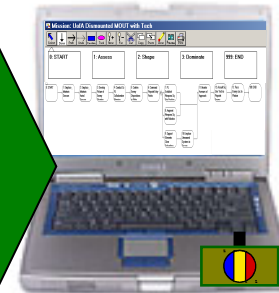
Operational Framework Urban Operations

Elements of Brigade
Offensive Operations

Battalion TF and Below
Perform these Tasks



Analytical Issues:
MPT Questions
SA Questions
Tech Integration Questions
HSI Requirements
Soldier Phys & Cog
Workload



CA Co Level

Company
Sized

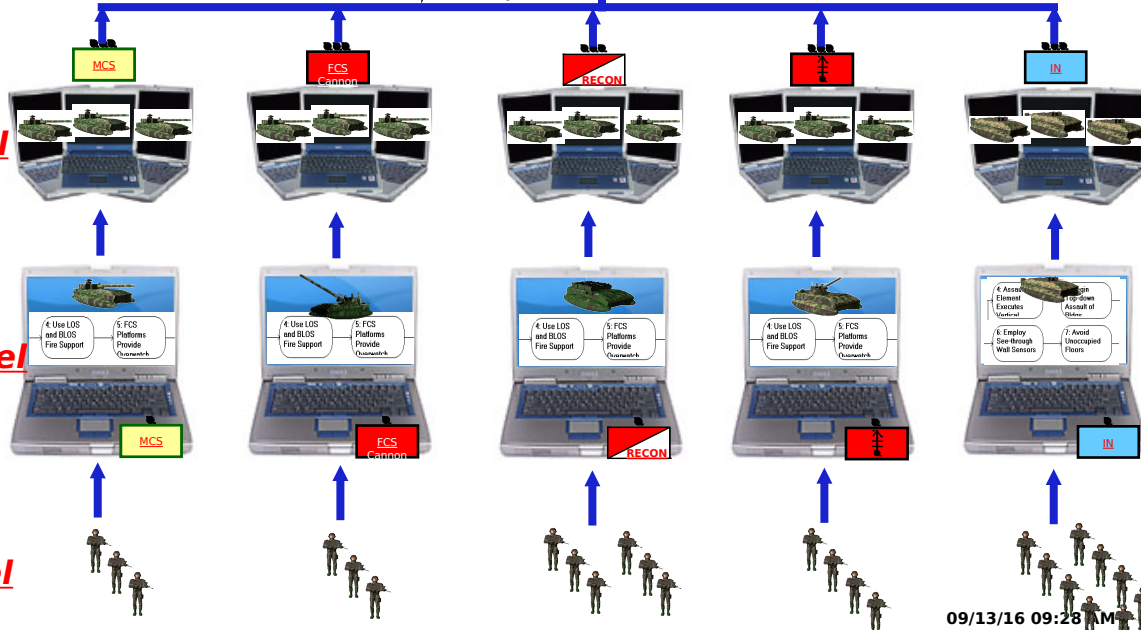
Sys PL Level

Platoon
Sized

Platform Level

Squad
Sized

Crew Level



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MANPRINT Must:

